Amendments to the Claims

This listing of claims will replace all prior versions, and listing, of claims in the application.

Listing of Claims:

1. (Previously Presented) An image-processing apparatus comprising:

a storing section having a storing area for storing image data that has been compressed and divided;

an image-processing control section that is configured and arranged so as to compresses and divide the image data and to store the compressed and divided image data in the storing section ("stored image data"), so as to combine and decompress the stored image data, so as to perform image processing on the combined and decompressed stored image data, so as to compress and divide the processed image data and to store the compressed and divided processed image data in the storing section;

wherein the image-processing control section includes a judgment section configured and arranged so as to make a judgment as to whether or not an empty storing area in the storing section is sufficient for storing the compressed and divided processed image data; and

wherein upon a judgment by the judgment section that the empty storing area is insufficient to store the compressed and divided processed image data, the image-processing control section controls the storage of the compressed and divided processed image data so as to allow the compressed and divided processed image data to be stored in storing areas of the storing section including the storing areas in which the stored image data was originally stored.

2. (Previously Presented) The image-processing apparatus as defined in claim 1,

wherein:

the storing area is constituted by a plurality of blocks, each storing one divided portion of

any image data being stored in the storing section, and

when the judgment by the judgment section shows that the empty storing area is

sufficient, the image-processing control section controls the storage of the compressed and

divided processed image data so as to preferentially use an empty storing area consisting of

continuous blocks so as to store the compressed and divided processed image data.

3. (Currently Amended) An image-processing apparatus comprising:

a storing section having a storing area for storing image data that has been compressed

and divided; and

an image-processing control section that is configured and arranged so as to preprocess

the image data, so as to compresses and divide the pre-processed image data and to store the

compressed and divided image data in the storing section ("stored image data"), so as to combine

and decompress the stored image data, so as to perform image processing on the combined and

decompressed stored image data, and so as to compress and divide the processed image data and

to store the compressed and divided processed image data in the storing section,

_____wherein the image-processing control section includes a judgment section configured and

arrange so as to make a judgment as to whether or not an empty storing area in the storing section

is sufficient for storing the compressed and divided processed image data,

wherein ~~the image-processing control section is further configured and arranged so~~ the

image processing ~~on the combined and decompressed stored image data~~ includes a combining

process for main image data and sub image data of the image data, and

_____wherein ~~the image-processing control section is further configured and arranged so~~ the

pre-processing ~~of the image data~~ includes a process for adding to the main image data a blank

section to which the sub image data is inserted~~, where the pre-processing is to add to a position~~

~~corresponding to a mode being set, white data for one page on the page memory, in a case where~~

~~the image data read out by the scanner is temporarily stored in the page memory.~~

4. (Previously Presented) An image-processing apparatus comprising:

a storing section having a storing area for storing image data that has been compressed

and divided; and

an image-processing control section being configured and arranged so as to combine and

decompress image data (stored image data) being stored in the storing section, so as to carry out

an image processing on the combined and decompressed image data, so as to compress and

divide the processed image data and to store the combined and divided processed image data in

the storing section,

wherein the image-processing control section includes a judgment section which makes a

judgment as to whether or not an empty storing area in the storing section is sufficient for storing

the compressed and divided processed image data, wherein based upon the judgment by the

judgment section, the image-processing control section controls the storage of the compressed

and divided processed image data so as to allow the compressed and divided processed image

data to be stored in storing areas in which the stored image data was originally stored.

5. (Previously Presented) The image-processing apparatus as defined in claim 4,

wherein,

when the judgment by the judgment section shows that the empty storing area is

insufficient to store the compressed and divided processed image data, the image-processing

control section controls the storage of the compressed and divided processed image data so as to

allow the compressed and divided processed image data to be stored in the storing areas in which

the stored image data was originally stored.

6. (Previously Presented) The image-processing apparatus as defined in claim 4,

wherein:

the storing area is constituted by a plurality of blocks, each storing one divided portion of

any image data being stored in the storing section, and

when the judgment by the judgment section shows that the empty storing area is

sufficient, the image-processing control section controls the storage of the compressed and

divided processed image data so as to preferentially use an empty storing area consisting of

continuous blocks so as to store the compressed and divided processed image data.

7. (Previously Presented) An image-processing apparatus, which comprises an image-

processing means for carrying out an image processing on image data, which image-processing

apparatus compresses and divides the processed image data so as to be stored in a storing means

in a divided manner, and which combines the group of the stored, divided and compressed

processed image data, and decompresses and restores the stored, divided and compressed

processed image data so as to be outputted, said image-processing apparatus comprising:

a storing area managing means for managing a storing area of the storing means, the

storing area managing means being designed so that, when, after a egroup of divided and

compressed unprocessed image data, which were divided and temporarily stored in the storing

means, have been restored and subjected to the image processing, the processed image data is

compressed and divided so as to be stored in the storing means;

a judgment means for making a judgment as to whether or not one or more empty storing

areas in the storing means are sufficient for storing the group of divided and compressed

processed image data after the image processing; and

wherein, when the judgment means shows that the empty storing areas are insufficient for

storing the group of divided and compressed processed image data, the storing area managing

means is designed so as to utilize a storing area used by the group of the divided and compressed

unprocessed image data so as to store the group of the divided and compressed processed image

data.

8. (Canceled)

9. (Previously Presented) The image-processing apparatus as defined in claim 7,

wherein, upon showing that the one or more empty storing areas are sufficient for storing the

group of the divided and compressed processed image data in the empty storing areas, the storing

area managing means preferentially carries out a storing process in a portion having continuous

sections each corresponding to one divisional portion of the compressed processed image data.

10. (Currently Amended) An image-processing apparatus, which comprises an image-

processing means for carrying out an image processing on stored image data, which image-

processing apparatus compresses and divides the processed image data so as to be stored in a

storing means in a divided manner, and which combines the group of the stored, divided and

compressed processed image data, and decompresses and restores the stored, divided and

compressed processed image data so as to be outputted, said image processing apparatus

comprising:

a pre-processing means which, upon having an instruction for an image-processing

involving an image combining process including a center binding edition and an edition for

collecting images corresponding to a plurality of pages into one page, carries out a pre-processing

for allowing preprocess image data of an image ~~of one of the plurality of pages~~ forming a subject

for the combining process to preliminarily possess a blank section ~~that is not related to the image~~

~~of the one of the plurality of pages~~, the blank section corresponding to a location to which the

image ~~of another of the plurality of pages~~ to be combined is to be inserted, and following such

preprocessing the image processing apparatus compressing, dividing and storing the

preprocessed data in the storing means as the stored image data; ~~and~~

~~wherein the pre-processing is to add, to a position corresponding to a mode being set,~~

~~white data for one page on the page memory, in a case where the image data read out by a~~

~~scanner is temporarily stored in the page memory.~~

11. (Previously Presented) The image-processing apparatus as defined in claim 2,

wherein the judgment section:

identifies contiguous blocks of the empty storing area,

determines if the contiguous blocks are sufficient for storing the compressed and divided

processed image data, and

upon a determination by the judgment section that the contiguous blocks are sufficient to store the compressed and divided processed image data, the image-processing control section controls the storage of the compressed and divided processed image data so as to preferentially allow the compressed and divided processed image data to be stored in the contiguous blocks.

12. (Previously Presented) The image-processing apparatus as defined in claim 6, wherein the judgment section:

identifies contiguous blocks of the empty storing area,

determines if the contiguous blocks are sufficient for storing the compressed and divided processed image data, and

upon a determination by the judgment section that the contiguous blocks are sufficient to store the compressed and divided processed image data, the image-processing control section controls the storage of the compressed and divided processed image data so as to preferentially allow the compressed and divided processed image data to be stored in the contiguous blocks.

13. (Previously Presented) The image-processing apparatus as defined in claim 1, wherein upon a judgment by the judgment section that the empty storing area is sufficient to store the compressed and divided processed image data, the image-processing control section controls the storage of the compressed and divided processed image data so the compressed and divided processed image data is stored in the empty storing area.

14. (Previously Presented) The image-processing apparatus as defined in claim 5,

wherein upon a judgment by the judgment section that the empty storing area is sufficient to store

the compressed and divided processed image data, the image-processing control section controls

the storage of the compressed and divided processed image data so the compressed and divided

processed image data is stored in the empty storing area.

15. (Previously Presented) The image processing apparatus as defined in claim 1,

wherein the compressed and divided processed image data is divided into predetermined block

units and wherein the image-processing control section controls the storage of the compressed

and divided processed image data so that the compressed and divided processed image data is

transferred block unit by block unit to the storing section.

16. (Previously Presented) The image processing apparatus as defined in claim 5,

wherein the compressed and divided processed image data is divided into predetermined block

units and wherein the image-processing control section controls the storage of the compressed

and divided processed image data so that the compressed and divided processed image data is

transferred block unit by block unit to the storing section.